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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,950	05/01/2001	Se Jong Oh	A34175	4659

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BAKER & BOTTS
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NEW YORK, NY 10112

EXAMINER	
MEW, KEVIN D	

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/846,950	OH, SE JONG	
	Examiner	Art Unit	
	Kevin Mew	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *01 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In particular, the applicant should avoid using the phrase "method for transmitting wireless packet data in a mobile communication system," which repeats the title of the application.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art, Cooper et al. (USP 6,055,430) in view of Kapanen (USP 6,792,274), and in further view of Ahn et al. (WO 99/53631).

Regarding claim 1, Cooper discloses a method for transmitting wireless packet data in a mobile communication system, which comprises a base station (central terminal) having a call processor (central terminal comprises call manager, see col. 1, line 62) therewithin, and terminals (wireless telecommunications system includes one or more service areas, each of which comprises a central terminal and subscriber terminals, see col. 5, lines 55-60 and Fig. 1); note that central terminal corresponds to base station), the method comprising the steps of:

initializing the call processor within the base station (call manager of the central terminal generates a call instance to store attributes provided by the call, col. 3 lines 66-67 and col. 4, lines 1-6), and then receiving a setup message from the terminals (central terminal receiving a call from the subscriber terminals, see col. 1, lines 62-64) and simultaneously;

generating a packet data call instance in response to the received time table assignment request message (call manager generates a call instance after receiving a call from subscriber terminals, see col. 1, lines 62-67);

Cooper does not explicitly disclose receiving a time table assignment request message from the control station, updating a time table, and transmitting a time table assignment completion message to the control station. However, Kapanen discloses a base station controller would detect the time slot allocation situation of the base transceiver stations and would indicate to the base transceiver station the identification of a free time slot to be allocated to the base transceiver station. Kapanen further discloses that the base transceiver station would inform the base station controller the connection was made so that in response to that information, the base station controller updates the allocation table such that the time slot is marked allocated to the base transceiver station in question (see col. 5, lines 15-52). Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to combine the wireless communication method of Cooper with the time slot allocation steps of Kapanen during call setup request by the subscriber terminals such that the central terminal of Cooper will receive time slot assignment request from the base station controller such as the base station controller taught by Kapanen. The motivation to do so is to provide time slot allocation for the call setup request initiated by the subscriber terminals so that the central terminal can transmit the call in frames that are made up of time slots.

Cooper and Kapanen do not explicitly disclose generating a radio bursting protocol (RBP) instance. However, Ahn discloses a mobile communication system in which short burst data is transmitted using an Radio Burst Protocol (see page 1, lines 14 and page 2, lines 3-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the wireless communication method of Cooper and Kapanen with the RBP protocol of Ahn such that the RBP protocol is used for passing control and data information between the central terminal and the subscriber terminals. The motivation to do so is to provide a lightweight automatic request (ARQ) protocol for transmitting data packets in a short burst period that improves the reliability of message delivery over shared channels.

Cooper and Kapanen do not explicitly show transmitting a slot information message through a paging channel to the terminals. However, Ahn discloses sending messages from a base station to the mobile station on a paging channel (see page 1, lines 19-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the wireless communication method of Cooper and Kapanen with Ahn for transmitting messages from base station to mobile station via the paging channel. The motivation to do so is

to provide a downlink transport channel to send control, call set-up, and paging messages when the mobile is not in the traffic mode.

Regarding claim 2, Cooper, Kapanen and Ahn discloses all the aspects of the claimed invention set forth in the rejection of claim 1 above, except fails to explicitly show the method of claim 1, wherein when transmitting the information message from the base station to the terminals, a time slot available to a common data channel is assigned to each channel by transmitting the common data channel in a time division manner. However, Cooper further discloses that a call connection for a subscriber terminal is placed on a particular time slot (see col. 1, lines 40-46). Ahn also discloses transmitting short data burst frames from base station to mobile station on a common data channel (see Fig. 4B). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the wireless communication method of Cooper and Kapanen with Ahn for transmitting messages in a common data channel where each available time slot of the common data channel is allocated for each call connection. The motivation to do so is to save network resources when using a common data channel for traffic from all call connections rather than using a dedicated channel for each individual call connection.

Regarding claim 3, Cooper discloses the method of claim 1, further comprising the step of transmitting, in the call processor within the base station, a response message to the setup message received from the terminals. However, Ahn discloses sending a response message from a base station to a mobile station after receiving a paging channel request message from the

mobile station (see page 1, lines 19-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the wireless communication method of Cooper and Kapanen with Ahn for a base station to send a response message to the mobile station that made a channel request message to the base station. The motivation to do so is to provide an acknowledgment to the mobile station to indicate that a connection has been established between the mobile station and the base station network and time slots have been allocated for the mobile station to transmit data traffic.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure with respect to a method for transmitting wireless data packet in mobile communication system.

US Patent 6,614,810 to Lee et al.

US Patent 6,556,556 to Sen et al.

US Patent 6,614,775 to Chang et al.

US Patent 6,167,248 to Hamalainen et al.

US Publication 2003/0063583 to Padovani et al.

US Publication 2002/0009070 to Lindsay et al.

US Publication 2003/0008632 to Menon et al.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 703-305-5300. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDM
Art Unit 2664